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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,488	08/30/2001	Warren M. Farnworth	3996US (99-0254)	1571
24247 759	0 11/06/2003	EXAMINER		NER
TRASK BRITT			LUK, EMMANUEL S	
P.O. BOX 2550 SALT LAKE CITY, UT 84110			ART UNIT	PAPER NUMBER
	,		1722	ich
			DATE MAILED: 11/06/2003	19

Please find below and/or attached an Office communication concerning this application or proceeding.

· •		(160-18 -1AV			
	Application No.	Applicant(s)			
Office Action Summany	09/944,488	FARNWORTH, WARREN M.			
Office Action Summary	Examiner	Art Unit			
	Emmanuel S. Luk	1722			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with t	he correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period was Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	86(a). In no event, however, may a reply of within the statutory minimum of thirty (30 will apply and will expire SIX (6) MONTHS cause the application to become ABAND	De timely filed) days will be considered timely. from the mailing date of this communication. ONED (35 U.S.C. § 133).			
1) Responsive to communication(s) filed on <u>02 S</u>	eptember 2003 .				
2a) ☐ This action is FINAL . 2b) ☑ Thi	s action is non-final.				
Since this application is in condition for allowa closed in accordance with the practice under EDisposition of Claims					
4) Claim(s) 1-74 is/are pending in the application.	•				
4a) Of the above claim(s) 32-50 and 67-74 is/ar	e withdrawn from considerati	on.			
5)⊠ Claim(s) <u>17-31</u> is/are allowed.					
6)⊠ Claim(s) <u>1-16 and 51</u> is/are rejected.					
7)⊠ Claim(s) <u>52-66</u> is/are objected to.					
8) Claim(s) are subject to restriction and/or	election requirement.				
Application Papers					
9)☐ The specification is objected to by the Examiner		•			
10) The drawing(s) filed on is/are: a) accept	ted or b)□ objected to by the E	Examiner.			
Applicant may not request that any objection to the	drawing(s) be held in abeyance	. See 37 CFR 1.85(a).			
11) The proposed drawing correction filed on	is: a) ☐ approved b) ☐ disap	proved by the Examiner.			
If approved, corrected drawings are required in reply to this Office action.					
12) The oath or declaration is objected to by the Exa	aminer.				
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 11	9(a)-(d) or (f).			
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents	have been received in Applic	cation No			
 Copies of the certified copies of the priori application from the International Burn See the attached detailed Office action for a list of 	eau (PCT Rule 17.2(a)).	•			
14) Acknowledgment is made of a claim for domestic	•	•			
a) ☐ The translation of the foreign language prov 15)☐ Acknowledgment is made of a claim for domestic	visional application has been	received.			
Attachment(s)	phony under 00 0.0.0. 33	izo allator iz i			
Notice of References Cited (PTO-892) Discrete Notice of Draftsperson's Patent Drawing Review (PTO-948) Discrete Notice of Draftsperson's Patent Drawing Review (PTO-948) Notice of Draftsperson's Patent Drawing Review (PTO-1449)	5) Notice of Inform	nary (PTO-413) Paper No(s) nal Patent Application (PTO-152)			

U.S. Patent and Trademark Office PTOL-326 (Rev. 04-01)

DETAILED ACTION

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Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-3 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Steijer et al (5985185).

Steijer et al teaches the claimed apparatus having a first platen (1) with a plurality of alignment elements projecting therefrom (73, 85), the sets of alignment elements for engaging sets of alignment features of a like electronic component assembly and a second platen (17) having a plurality of spaced locations corresponding to the first platen (19), including sets of alignment receptacles (87). The alignment are pins and

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there at least two alignment elements located adjacent each component cavity (Fig. 1). The first and second plates are releasably securable via clamping structure (Col. 9, lines 27-34 and 38-45).

4. Claim 51 is rejected under 35 U.S.C. 102(a) as being anticipated by Farnsworth et al (6482576).

Farnsworth teaches a stereolithography machine (10) that forms a workpiece (44), the machine having a camera that is part of the machine vision system (76) and platen assembly support structure (32) with a platen assembly (30) that is enabled to rotate in the horizontal axis (88) and a computer (12) that responds to the input from the machine vision system.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 4-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steijer et al as applied to claims 1-3 and 15 above, and further in view of Chang et al (6562272 B1).

Steijer fails to teach a plurality of subcavities formed by strut members in mutually laterally spaced locations.

Chang et al teaches a platen (110) having a plurality of mutually laterally spaced cavities (120) with multiple strut members between the cavities (Fig. 6). Steijer teaches producing encapsulation of semiconductor members in a mold cavity between a first and second plate and it would have been obvious to one skilled in the art for modifying the apparatus with multiple cavities for a multiplied effect. *In re Harza*, 124 USPQ378 (CCPA 1960).

It would have been obvious to one of ordinary skill in the art to modify Steijer with a plurality of cavities as taught by Chang because it would allow for use of larger chip array block sizes.

Allowable Subject Matter

- 8. Claims 17-31 and 52-66 are allowed.
- 9. Claims 52-66 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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10. The following is an examiner's statement of reasons for allowance: The prior art of record fails to teach a stereolithography machine having a first and second platen having sets of alignment elements and a plurality of cavities that engage the platen assembly support structure. The closest prior art, Farnsworth et al, Steijer et al and Chang et al, fail to teach this arrangement of the platen structure located in a stereolithography apparatus.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

- 11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Steijer et al (6193493 B1) and Takakuwa et al (6280661 B1).
- 12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel S. Luk whose telephone number is (703) 305-1558. The examiner can normally be reached on Monday through Friday 8 to 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on (703) 308-0457. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

E.L.